# Wyse® Z class™

Built for when performance matters most.

WYSE

THE GLOBAL LEADER IN
CLOUD CLIENT COMPUTING

Wyse Z class: **All you need to know. Here.**

# Introducing the Wyse Z class

## Built for when performance matters most

### Wyse Z class

The Wyse Z class brings unrivalled high performance to users demanding more from their virtual desktops. Seven models are available featuring Wyse Enhanced SUSE Linux, Windows Embedded Standard 2009 and Windows Embedded Standard 7 operating systems, and a cloud PC for use with Wyse WSM.

## Thin clients

### Z50S

Featuring Wyse Enhanced SUSE Linux Enterprise, the industry's only enterprise-quality Linux OS optimized by Wyse for thin computing.

### Z50D

Highest performing dual-core thin client with all the security, flexibility, and market-leading usability of Wyse Enhanced SUSE Linux Enterprise.

### Z90SW

High performance Windows Embedded Standard 2009 thin client for the most demanding Virtual Desktop Environments.

vmware READY

HDX

### Z90DW

Highest-performing dual-core thin client based on Windows Embedded Standard 2009.

vmware READY

HDX

### Z90S7

High performance thin client. Harnesses the rich user experience of Windows Embedded Standard 7.

vmware READY

HDX

Microsoft RemoteFX Enabled

### Z90D7

High performance dual-core thin client based on Windows Embedded Standard 7.

vmware READY

HDX

Microsoft RemoteFX Enabled

### Z90DE7

High performance dual-core thin client based on Windows Embedded Standard 7 with expansion capabilities through a PCIe expansion slot.

Microsoft RemoteFX Enabled

## Cloud PC

### Z00D

Highest-performing dual-core cloud PC for Wyse WSM.

# **Features** Wyse Z class

**New Wyse Z class is the ideal high performance cloud client that's perfectly suited to users who're increasingly demanding more from their virtual desktop environments – as well as the traditional cloud client benefits of security and management.**

Featuring fast processing, accelerated graphics and multimedia, fast and flexible user connectivity and excellent energy-efficiency never seen before in a cloud client, new Wyse Z class delivers uncompromising high performance when users need it most.

Wyse Device Manager supports Wyse Z class with scalable enterprise-wide management including simple deployment, patching and updates and asset management – all with secure end-to-end encrypted communications.

Like all Wyse cloud clients, new Wyse Z class is one cool operator. Its energy efficient processor – which out-performs other more power hungry alternatives – and silent fan-less design, all contribute to lowering an organization's carbon footprint through power usage and emissions that are a fraction of traditional PC desktops.

**Cloud clients**

**Performance**

**Connectivity**

**Z90DE7 Connectivity**

**Mounting options**

**Green**

EarthSmart Computing™

**Wyse Enhanced SUSE Linux**

suse

**Microsoft Windows Embedded Standard 2009**

Windows Embedded Standard 2009

**Microsoft Windows Embedded Standard 7**

Windows Embedded Standard 7

**Software**

**Thin Client Management**

Wyse WDM™

**Cloud PC Provisioning**

Wyse WSM™

**User Experience Optimization**

**User Experience Acceleration**

**Take a tour of the Wyse Z class range**

# **High Performance** cloud client

## When performance matters most

**Fast processing.**
**Accelerated graphics and multimedia.**
**Fast and flexible user connectivity.**
**Excellent energy-efficiency.**

From the instant the new Wyse Z class boots up it delivers everything that today and tomorrow's users need in order to tackle the most demanding virtual desktop environments.

At its heart beats the very latest single or dual core AMD G-Series Accelerated Processing Units or APUs, where all the processing, graphics and HD video tasks are performed on the same piece of silicon. Giving a dramatic leap in user experience and the ideal platform to reap the benefits of Wyse cloud, virtualization and management software.

AMD **Fusion**
FAMILY OF APUs
EMBEDDED TECHNOLOGY

### Processor

**The AMD Embedded G-Series platform is the world's first low power processor and advanced GPU that's integrated into a single embedded Accelerated Processing Unit (APU).**

## High definition multimedia experience

Display, manipulate and work with stunning high definition multimedia graphics, voice and video in virtual desktop environments that are ready for Unified Communications. That's the promise the Wyse Z class more than delivers on, with great performance across 2D, 3D and HD video applications. Its new design takes them all in its stride and is the first to include hardware accelerated DirectX® 11 graphics with OpenGL 4.0 and OpenCL™ support.

a b g WiFi n CERTIFIED

SUPERSPEED USB

**Continue tour**

# **Connectivity** Fast and flexible

**Wyse Z50S & Z50D, Z90SW & Z90DW, Z90S7 & Z90D7 thin clients and Z00D cloud PC.**

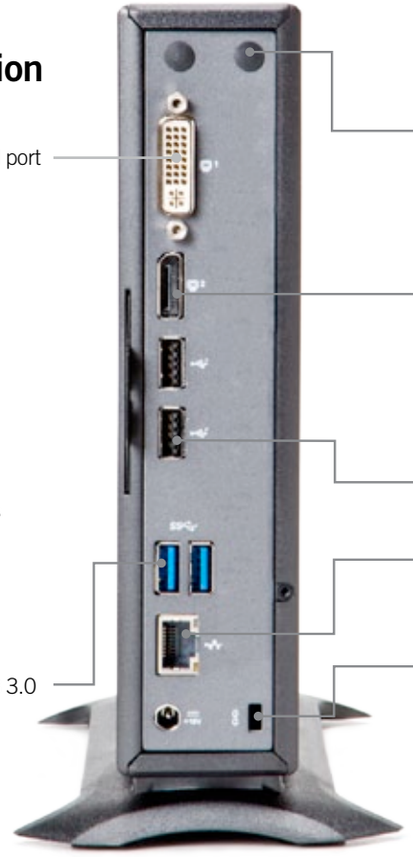
## Standard configuration

Output:
Digital audio

Input:
8 bit stereo
microphone

2 USB 2.0 ports

**Front of device**



DVI-I port

Dual Band 802.11
a/b/g/n Wireless
(factory option)

DisplayPort

2 USB 2.0 ports

10/100/1000 Base-T Gigabit
ethernet port

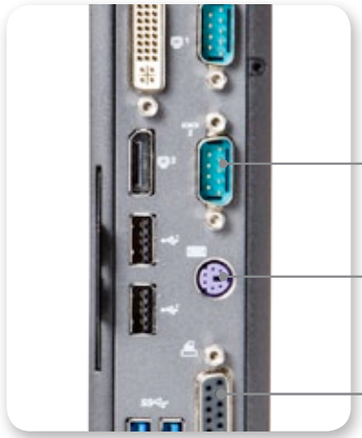
Kensington lock slot

2 USB 3.0
ports

## Option 1

Fiber NIC port

## Option 2



2 serial ports

PS/2 port

Parallel port for
printer connection

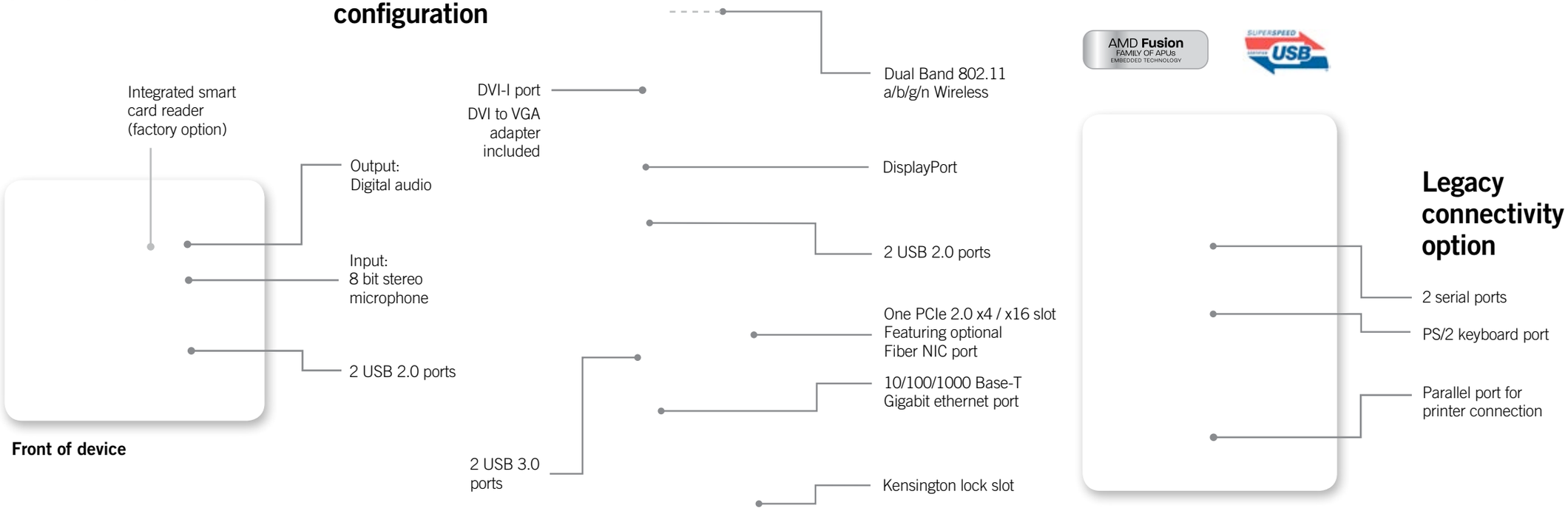
Some features require local OS support and may not be available with all OSs.

**Continue tour**

# **Connectivity** Extreme flexibility

## Wyse Z90DE7 thin client.

## Standard configuration


Integrated smart card reader (factory option)
Output: Digital audio
Input: 8 bit stereo microphone
2 USB 2.0 ports
Front of device
DVI-I port
DVI to VGA adapter included
Dual Band 802.11 a/b/g/n Wireless
DisplayPort
2 USB 2.0 ports
One PCIe 2.0 x4 / x16 slot Featuring optional Fiber NIC port
10/100/1000 Base-T Gigabit ethernet port
2 USB 3.0 ports
Kensington lock slot
AMD Fusion FAMILY OF APUs EMBEDDED TECHNOLOGY
SUPERSPEED USB
Legacy connectivity option
2 serial ports
PS/2 keyboard port
Parallel port for printer connection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# Operating Systems Microsoft Windows Embedded Standard 7

New Windows Embedded Standard 7 (WES 7) delivers a wealth of enhanced deployment, user experience and management benefits to Wyse desktops, mobiles and thin clients deployed across an organization's virtualized network.

## Richer user experience.

Wherever they are - deskbound or mobile - with Microsoft Windows Embedded Standard 7 your users can benefit from the rich user experience of the Aero interface and the power, familiarity and reliability of the Windows 7 operating system in a highly customizable and componentized form.

Full support is provided for Remote Desktop Protocol (RDP) 7.1 with RemoteFX technology to provide seamless connectivity to Windows Server 2008 R2 and virtual desktop infrastructure scenarios. The Wyse-enhanced WES7 platforms include additional features supporting the latest Citrix Online Plug-in and VMware View 4.6 to fit the needs of your most sophisticated users and making it an optimum OS for organizations wanting broad support for Cloud computing and desktop virtualization. Citrix Online Plug-in provides the HDX user experience and View 4.6 provides localization and Virtual Printing.

The platform also features additional Windows technology innovations to drive rich, immersive user experiences, including Internet Explorer 8. There's full support and inbuilt flexibility too, to add and support a host of desktop peripherals with permission from the IT administrator.

Windows Embedded Gold Partner

## Easier to manage and deploy.

Now, with WES7, deploying 32-bit capable thin clients is easier and more manageable than ever before and reflects the direct working relationship between Wyse and Microsoft. The support for Domain Join and group policies through Active Directory, help with management and integration of thin clients into existing desktop management infrastructures.

Windows Embedded Standard 7

Wyse Configuration Manager delivers unprecedented simplicity to the management of virtual desktops by allowing IT departments to auto-configure thin clients running Wyse-enhanced Windows Embedded Standard. By automating the deployment of WES thin clients throughout a private cloud WCM offers multiple benefits to organizations: reducing the need to do imaging, deploying custom images and faster configuration updates. Client devices are updated with the latest configuration settings for VDI connections (RDP, Citrix, VMware View), device settings and OS configuration automatically when devices startup.

Wyse Device Manager (WDM) addresses key management requirements. With its centralized management and administration, WDM helps IT departments deliver more effective remote thin client support while minimizing end user downtime. In addition, the Wyse USB Firmware Tool allows IT and Customer Service staff to quickly and easily image the devices directly.

## Enterprise-wide consistency.

Wyse Embedded Standard 7 and Wyse provide the ideal, cost effective opportunity to deploy a consistent, high performance operating system across Wyse cloud clients.

Continue tour

# Thin Client Management Wyse Device Manager

Wyse Device Manager (WDM) addresses key management requirements for deploying powerful thin clients. With its centralized management and administration WDM helps IT departments deliver more effective remote thin client support while minimizing end user downtime.

**Security is assured with HTTPS based imaging, updates and downloads.**

**WDM delivers organization-wide benefits:**

| | |
|---|---|
| **Operations** | Centralized management.<br>Collect and organize asset information. |
| **Administration** | Health status reports.<br>Automated client settings.<br>Update client firmware and add applications. |
| **End User IT Costs** | Easier more effective remote support.<br>Create custom scripts and packages. |
| **Minimize downtime** | Restart or reset thin clients in less than a minute.<br>Enforce policies. Minimize user errors. |

## At a glance.

| | |
|---|---|
| **Security** | HTTPS Based Imaging / Updates<br>Fully Encrypted Network Traffic<br>Delegated Admin Access (MS AD) Support |
| **No-Hassle Deployment** | Complete Device Imaging / Patching / Updates<br>Bandwidth Throttling for Efficiency / Reliability<br>Software Updates and Add-ons |
| **Device Administration and Monitoring** | Device Health Status / Reporting<br>Remote Shadowing / Control<br>Default Device Configuration |
| **Reduce End User IT Costs** | Reduce energy consumption with scheduled up/down times |
| **Scalability** | Distributed Architecture<br>Microsoft SQL Database Support<br>Multiple Remote Repository Support |
| **Complete Asset Visibility** | Automated device discovery<br>Detailed Hardware Asset information<br>Installed Software Asset information |

Wyse WDM™

**Continue tour**

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# Cloud PC Provisioning Wyse WSM

## Enterprise computing from the cloud is here. Whatever you want. Wherever you need it.

That's the thinking behind Wyse WSM. It's a dynamic on-demand streamed computing environment where everyone gets their preferred operating systems, applications, user data and documents: Wherever they are and whenever they need them.

And Wyse WSM goes beyond the traditional VDI model too - with full support for mobile workers and remote branch offices. Wyse WSM effectively changes the rules on what's possible and opens up the benefits of high performance desktops to enterprise users: Wherever they are.

## Better than a PC could ever be.

With Wyse WSM users - such as those in the financial or retail industries - are given a fresh computer with their chosen PC operating system, applications and files all preloaded and ready-to-go, every time they sit down and start-up their powerful desktop devices known as Wyse 'cloud PCs'.

Wyse WSM™

Wyse cloud PCs feature powerful processors that enable them to run full PC operating systems and applications locally, while keeping their documents and data secure on central Wyse WSM servers. Enabling existing PC users to continue to use all their familiar operating systems and applications seamlessly - but with greater reliability and better overall performance than a full PC - with the result that many users don't even realize they're using a cloud PC.

And - better still, Wyse WSM features a highly secure, robust and resilient network design that's ideal for remote offices and mission critical deployments such as the defence industry.

**With everything managed, updated, configured remotely and securely, Wyse WSM is everything a PC promises. Minus the headaches.**

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wyse.com

# User Experience Optimization Wyse TCX™ Suite

**with Collaborative Processing Architecture™**

## Wyse TCX delivers an amazing user experience in one software suite.

Wyse TCX Suite of virtualization software enriches the user experience by removing the limitations previously associated with thin clients. It enhances, not replaces, key protocols like ICA/HDX and RDP by adding key features to make each more valuable.

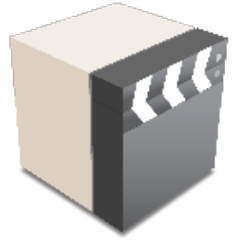
### Multi-display

Ensures application windows and dialog boxes are multi-monitor aware when using more than one monitor.

### USB Virtualization

Enables plug and play peripheral support for virtual desktop environments.

- Redirect and use local USB devices in virtual desktops.
- Deploy virtual desktops to knowledge workers with special device access needs.
- Enable a broad set of USB peripherals including webcams and headsets.



### Multimedia acceleration

Streamlines the delivery of video and audio content to the local client for a rich user experience within a thin client computing architecture.

- Accelerates Mpeg1, Mpeg2, WMV, Mpeg4 Part 2, AC3, AAC, MP3, WAV, WMA media types.
- Collaborative Processing Architecture enhances server scalability, and network utilization by off-loading multimedia rendering to the client.

### Flash acceleration

Flash acceleration helps thin client users to experience improved Flash video performance. While the Flash player continues to run server-side, the resulting images are transcoded and redirected to the client for fast rendering. The technology allows for greater control of frame rate and compression and supports enhanced playback of YouTube-style flash videos in Internet Explorer.

### Bi-directional sound

Enables bi-directional audio in virtual desktop environments, enabling solutions such as VOIP, digital dictation or voice recognition to be deployed.

**Continue tour**

# **Virtualization Software** Wyse Virtual Desktop Accelerator

## Removing the barriers of network latency

Wyse Virtual Desktop Accelerator (VDA) enables virtualized desktop and thin computing environments to be deployed to areas where network latency has, to date, presented operational barriers. Now, with Wyse VDA, more users can receive the full benefits of Wyse thin computing – with the best PC experience over virtualized desktops.

Wyse VDA is a software-only solution for Wyse thin clients and supported PCs that delivers the best user experience for the allocated network bandwidth by neutralizing the effects of network latency and packet loss. Making 'thin' suitable for more remote-site, branch, or field-based users.

Wyse VDA works with instead of replacing existing RDP and ICA protocols, accelerating them by up to 20 times on networks faced with latencies up to and beyond 300ms, and at least 768kbps bandwidth.

## At a glance features.

- Software-only acceleration of virtual desktops and applications
- Accelerates existing Citrix ICA and Microsoft RDP protocols
- Works on WANs and 'fat, long pipes'
- Accelerates connections to Citrix XenApp, Citrix XenDesktop, VMware View and Microsoft Terminal Server and Microsoft Hyper-V VDI
- Enhances Wyse TCX software suite functionality across wide-area networks
- Enables Wyse Collaborative Processing Architecture across wide-area networks
- Administrator console provides control of maximum bandwidth per connection
- Leverages built-in security of underlying protocols (128-bit encryption for RDP and ICA).

**Continue tour**

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# **Technical** Wyse Z class specifications

The Wyse Z class family features Wyse Enhanced SUSE Linux, Microsoft Windows Embedded Standard 2009 and Windows Embedded Standard 7 operating systems, as well as cloud PC software via Wyse WSM.

**Want to learn more? Simply click the relevant icon.**

## Cloud clients

**Wyse Z class specifications**

**Wyse Z90DE7 specifications**

**Wyse Enhanced SUSE Linux**

**Microsoft Windows Embedded Standard 2009**

**Microsoft Windows Embedded Standard 7**

## Cloud software

**Cloud PC Provisioning**

# Specifications

## Wyse Z50S & Z50D, Z90SW & Z90DW, Z90S7 & Z90D7 thin clients and Z00D cloud PC.

| | |
|---|---|
| **Processors** | AMD G-T52R 1.5 GHz Processor with AMD Radeon™ HD 6310 Graphics<br>Dual core AMD G-T56N 1.65 GHz Processor with AMD Radeon™ HD 6310 Graphics |
| **Memory** | Z50S & Z50D 2GB Flash / 2GB DDR3 RAM<br>Z90SW & Z90DW 2GB Flash / 2GB DDR3 RAM<br>Z90S7 & Z90D7 4GB Flash / 2GB DDR3 RAM<br>Z00D 0GB Flash / 2GB DDR3 RAM<br>Expandable up to 32GB Flash / 4GB DDR3 RAM |
| **I/O peripheral support** | One DisplayPort. (Optional DisplayPort to DVI-I adapter available)<br>One DVI-I port. DVI to VGA (DB-15) adapter included<br>Six total USB ports: Four USB 2.0 ports (two front, two rear) and<br>Two SuperSpeed USB 3.0* ports on rear (backwards compatible with USB 2.0)<br>Enhanced USB Keyboard with Windows Keys (104 keys) and PS/2 mouse port<br>PS/2 Optical mouse included<br>**Factory options:**<br>Legacy connectivity - adds 2 serial ports, 1 parallel port and 1 PS/2 keyboard port |
| **Networking** | 10/100/1000 Gigabit Ethernet<br>**Factory options:**<br>Dual Band 802.11 a/b/g/n Wireless<br>Fiber NIC network connectivity |
| **Display** | VESA monitor support with Display Data Control (DDC) for automatic setting of resolution and refresh rate<br>DisplayPort: 2560x1600@32bpp<br>DVI-I: 1920x1200@32bpp<br>Dual display: 1920x1200@32bpp |
| **Audio** | Output: 1/8-inch mini jack, full 16 bit stereo, 48KHz sample rate, Digital Audio Out, Internal Mono speaker<br>Input: 1/8-inch mini jack, 8 bit stereo microphone |

| | |
|---|---|
| **Physical characteristics** | Height: 7.87 inches (200mm)<br>Width: 1.85 inches (47mm)<br>Depth: 8.85 inches (225mm) |
| **Weight** | 2.47 lbs. (1.12kg) |
| **Mountings** | Vertical feet standard<br>Horizontal feet optional<br>Optional VESA mounting bracket |
| **Device Security** | Built-in Kensington security slot (cable sold separately) |
| **Power** | Worldwide auto-sensing 100-240 VAC, 50/60 Hz.<br>Energy Star V.5.0<br>Phase V external and EuP compliant power adapter<br>Average power usage with device connected to 1 keyboard with 1 PS/2 mouse and 1 monitor: Under 15 Watts |
| **Temperature Range** | Operating: 32° to 104° F (10° to 40° C), horizontal and vertical positions<br>Storage : 14° to 140° F (-10° to 60° C) |
| **Humidity** | 20% to 80% condensing<br>10% to 95% non-condensing |
| **Safety Certifications** | German EKI-ITB 2000, ISO 9241-3/-8<br>cULus 60950, TÜV-GS, EN 60950<br>FCC Class B, CE, VCCI, C-Tick<br>WEEE, RoHS Compliant<br>Energy Star & EPEAT listed** (pending) |
| **Warranty** | Three-year limited hardware warranty |

AMD Fusion FAMILY OF APUs EMBEDDED TECHNOLOGY

USB

* Support for SuperSpeed USB 3.0 is currently not available in Wyse SUSE Linux.

** Not applicable to some option/memory configurations.

# Specifications

## Wyse Z90DE7 thin client.

| | |
|---|---|
| **Processor** | Dual core AMD G-T56N 1.65 GHz Processor with AMD Radeon™ HD 6310 Graphics |
| **Memory** | Z90DE7 4GB Flash / 2GB DDR3 RAM<br>Expandable up to 32GB Flash / 4GB DDR3 RAM |
| **I/O peripheral support** | One DisplayPort. (Optional DisplayPort to DVI-I adapter available)<br>One DVI-I port. DVI to VGA (DB-15) adapter included<br>Six total USB ports: Four USB 2.0 ports (two front, two rear) and<br>Two SuperSpeed USB 3.0* ports on rear (backwards compatible with USB 2.0)<br>Enhanced USB Keyboard with Windows Keys (104 keys) and PS2 mouse port<br>PS/2 Optical mouse included<br>**Factory options:**<br>Legacy connectivity - adds 2 serial ports, 1 parallel port and 1 PS/2 keyboard port |
| **Networking** | 10/100/1000 Gigabit Ethernet<br>**Factory options:**<br>Dual Band 802.11 a/b/g/n Wireless<br>Integrated smart card reader |
| **Display** | VESA monitor support with Display Data Control (DDC) for automatic setting of resolution and refresh rate<br>DisplayPort: 2560x1600@32bpp<br>DVI-I: 1920x1200@32bpp<br>Dual display: 1920x1200@32bpp |
| **Audio** | Output: 1/8-inch mini jack, full 16 bit stereo, 48KHz sample rate, Digital Audio Out, Internal Mono speaker<br>Input: 1/8-inch mini jack, 8 bit stereo microphone |

| | |
|---|---|
| **Physical characteristics** | Height: 8.46 inches (215mm)<br>Width: 2.72 inches (69mm)<br>Depth: 8.85 inches (225mm) |
| **Weight** | 3.5 lbs. (1.59kg) |
| **Mountings** | Vertical feet standard<br>Horizontal feet optional<br>Optional VESA mounting bracket |
| **Device Security** | Built-in Kensington security slot (cable sold separately) |
| **Power** | Worldwide auto-sensing 100-240 VAC, 50/60 Hz.<br>Energy Star V.5.0<br>Phase V external and EuP compliant power adapter<br>Average power usage with device connected to 1 keyboard with 1 PS/2 mouse and 1 monitor: Under 15 Watts** |
| **Temperature Range** | Operating: 32° to 104° F (10° to 40° C), horizontal and vertical positions<br>Storage : 14° to 140° F (-10° to 60° C) |
| **Humidity** | 20% to 80% condensing<br>10% to 95% non-condensing |
| **Safety Certifications** | German EKI-ITB 2000, ISO 9241-3/-8<br>cULus 60950, TÜV-GS, EN 60950<br>FCC Class B, CE, VCCI, C-Tick<br>WEEE, RoHS Compliant<br>Energy Star & EPEAT listed*** (pending) |
| **Warranty** | Three-year limited hardware warranty |

AMD Fusion FAMILY OF APUs EMBEDDED TECHNOLOGY

USB

* Support for SuperSpeed USB 3.0 is currently not available in Wyse SUSE Linux.

** Can use up to 35 watts with the expansion slot occupied and operational.

*** Not applicable to some option/memory configurations.

# Software specifications

## Wyse enhanced SUSE Linux

| | |
|---|---|
| **Firmware features** | Wyse enhanced SUSE Linux based on SLED 11 SP1<br>Automatic Central Configuration (text-based INI's)<br>Automatic Upgrades (FTP, HTTP, HTTPS)<br>Secure, read-only file system with lockdown abilities<br>Wyse RDP client (RDP7 Compatible)<br>Citrix Online Plugin 11.2 client (ICA 11.2) w/ HDX Mediastream, Plug-n-Play, Realtime, etc.<br>VMware View Open Client compatible with View 4.5<br>Ericom PowerTerm InterConnect Terminal Emulation<br>Ericom PowerTerm WebConnect<br>Cisco, Juniper, Nortel, IPSEC VPN Support (Add-ons)<br>Local/Remote Printing support (CUPS, LPR/LPD, Samba, ThinPrint,etc)<br>Web-based applications (Firefox, Flash, JAVA,etc)<br>XDMCP<br>SSH |
| **Server OS Infrastructure Support** | Citrix XenApp / Citrix Presentation Server<br>Citrix XenDesktop<br>VMware View<br>Microsoft Windows Terminal Server 2003 & 2008 |
| **Keyboard language support** | 100+ Keyboard Layouts supported locally (English, German, Spanish, French, Italian, Dutch, Chinese, Japanese, Turkish) |
| **Management** | Automatic, "hands-off" configuration and upgrading of thin clients without the need for device management software. Optionally, administrators can choose to integrate with Wyse Device Manager (WDM) for more hands-on control:<br>- Complete image upgrade<br>- Wake terminal remotely (Wake-on LAN)<br>- Remote screen shadowing of entire desktop (VNC)<br>- Asset management and reporting |

| | |
|---|---|
| **Wireless support** | WPA Personal, WPA2 Personal, WPA Enterprise<br>WPA Enterprise Authentication support<br>PEAP/TLS: PAP/MSCHAP/MSCHAPV2 support |
| **Wyse TCX Suite** | Advanced support for innovative Wyse TCX Suite virtualization software that both works with and enhances ICA and RDP (instead of replacing them) featuring:<br>- Multimedia acceleration - the power to run rich multimedia files formats ultilizing Wyse Collaborative Processing Architecture (CPA) that intelligently redirects the necessary processing tasks between the thin client and the server.<br>- Multi-display - ensures that windows and dialogue boxes behave the way users expect when using more than one monitor.<br>- USB Virtualization - makes thin client-attached USB devices visible to virtual desktops and applications, with full IT control.<br>- Bi-directional sound - enables virtual desktops and applications to receive and transmit high quality audio without compromise.<br>- Flash acceleration - helps users of thin clients to experience improved Flash performance. |
| **Wyse Virtual Desktop Accelerator** | Wyse Virtual Desktop Accelerator Delivers the best user experience for the allocated network bandwidth. Wyse Virtual Desktop Accelerator neutralizes the effects of network latency and packet loss, making cloud client computing more suitable for more remote-site, branch, or field-based users - and boosts RDP and ICA up to 20 times on networks with latencies up to and exceeding 300ms and at least 768kbps bandwidth. |

# Software specifications

## Microsoft Windows Embedded Standard 2009

| | |
|---|---|
| **Firmware features** | Microsoft Windows Embedded Standard 2009<br>Microsoft Internet Explorer 8.0 resident: HTML, JavaScript, XML, Active X Sun JRE, Media Player, Citrix Web Interface<br>RDP 7.0 resident<br>Citrix Online Plugin 11.2 resident (ICA 11.2)<br>VMware View 4.0.1 client resident<br>Ericom PowerTerm InterConnect Terminal Emulation<br>Ericom PowerTerm WebConnect client<br>Windows Media Player 11, .NET 3.5 |
| **Server OS Infrastructure Support** | Citrix XenApp / Citrix Presentation Server<br>Citrix XenDesktop<br>VMware View<br>Ericom PowerTerm WebConnect<br>Microsoft Windows Terminal Server 2003 & 2008 |
| **Application Framework** | .Net 3.5 |
| **Security** | File Based Write Filter (FBWF)<br>Microsoft Baseline Security Analyzer (MBSA) |
| **Set-up and Configuration** | Boot from local flash<br>Microsoft Windows WES7 user interface languages: U.S, Optional add-ons |
| **Keyboard language support** | U.S. English (standard), French, German, Spanish, U.K. English, 40 other languages included |
| **Protocol Support** | TCP/IP, DNS, DHCP, PXE |
| **Management** | Remote management, configuration, and upgrades through Wyse Device Manager<br>Complete image upgrade<br>Wake terminal remotely (Wake-on LAN)<br>Terminal configuration (IP information, name, etc.)<br>Remote screen shadowing of entire desktop (Wyse Remote Shadow)<br>Reporting, Asset management<br>SMS / Altiris |

| | |
|---|---|
| **Wireless support** | 802.11 a/b/g/n support with external wireless adapter or internal wireless adapter option*<br>WPA-2, WEP, WPA wireless authentication<br>PEAP-GTC wireless authentication protocol with optional Juniper Odyssey Client<br>Supports PC-Card wireless adapters from: Cisco, D-Link, Netgear, US Robotics, Trendware* |
| **Plug-ins** | Adobe Flash Player<br>Adobe Shockwave<br>Microsoft Silverlight |
| **Wyse TCX Suite** | Advanced support for innovative Wyse TCX Suite of virtualization software that both works with and enhances ICA and RDP (instead of replacing them) featuring:<br>- Multimedia acceleration - the power to run rich multimedia files formats ultilizing Wyse Collaborative Processing Architecture (CPA) that intelligently redirects the necessary processing tasks between the thin client and the server.<br>- Multi-display - ensures that windows and dialogue boxes behave the way users expect when using more than one monitor.<br>- USB Virtualization - makes thin client-attached USB devices visible to virtual desktops and applications, with full IT control.<br>- Bi-directional sound - enables virtual desktops and applications to receive and transmit high quality audio without compromise.<br>- Flash acceleration - helps users of thin clients to experience improved Flash performance. |
| **Wyse Virtual Desktop Accelerator** | Neutralizes the effects of network latency and packet loss, making 'thin' more suitable for more remote-site, branch, or field-based users by boosting RDP and ICA up to 20 times on networks with latencies up to and exceeding 300ms and at least 768kbps bandwidth. |

*requires hardware support

# Software specifications

## Microsoft Windows Embedded Standard 7

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|---|---|
| **Firmware features** | Microsoft Windows Embedded Standard 7 (WES7)<br>Microsoft Internet Explorer 8.0 resident: HTML, JavaScript, XML, Citrix Web Interface<br>Microsoft RDP 6.1 client (Protocol 7.1 Supported) with RemoteFX technology<br>Citrix Online Plugin 12 resident (ICA 12) with HDX<br>Citrix XenDesktop<br>VMware View 4.6 client resident<br>Ericom PowerTerm InterConnect Terminal Emulation<br>Windows Media Player 12 |
| **Server OS Infrastructure Support** | Citrix XenApp / Citrix Presentation Server<br>Citrix XenDesktop<br>VMware View<br>Microsoft Windows Terminal Server 2003 & 2008 R2<br>MSFT VDI |
| **Security** | File Based Write Filter (FBWF) |
| **Set-up and Configuration** | Boot from local flash<br>Microsoft Windows WES7 user interface languages: U.S, Optional add-ons |
| **Keyboard language support** | U.S. English (standard), French, German, Spanish, U.K. English,<br>40 other languages included |
| **Protocol Support** | TCP/IP, DNS, DHCP, PXE |
| **Management** | Auto-configuration with Wyse Configuration Manager<br>Remote management, configuration, and upgrades through Wyse Device Manager<br>Complete image upgrade<br>Terminal configuration (IP information, name, etc.)<br>Reporting, Asset management<br>Simple USB imaging solution with Wyse USB Firmware Tool |

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| **Wireless support** | 802.11 a/b/g/n* support with external wireless adapter or internal wireless adapter option<br>WPA-2, WEP, WPA wireless authentication<br>PEAP-GTC wireless authentication protocol with optional Juniper Odyssey Client<br>Supports PC-Card wireless adapters* from: Cisco, D-Link, Netgear, US Robotics, Trendware |
| **Plug-ins** | Adobe Flash Player<br>Microsoft Silverlight |
| **Wyse TCX Suite** | Advanced support for innovative Wyse TCX Suite virtualization software that both works with and enhances ICA and RDP (instead of replacing them) featuring:<br>- Multimedia acceleration - the power to run rich multimedia files formats utilizing Wyse Collaborative Processing Architecture (CPA) that intelligently redirects the necessary processing tasks between the thin client and the server.<br>- Multi-display - ensures that windows and dialogue boxes behave the way users expect when using more than one monitor.<br>- USB Virtualization - makes thin client-attached USB devices visible to virtual desktops and applications, with full IT control.<br>- Bi-directional sound - enables virtual desktops and applications to receive and transmit high quality audio without compromise.<br>- Flash acceleration - helps users of thin clients to experience improved Flash performance. |
| **Wyse Virtual Desktop Accelerator** | Neutralizes the effects of network latency and packet loss, making 'thin' more suitable for more remote-site, branch, or field-based users by boosting RDP and ICA up to 20 times on networks with latencies up to and exceeding 300ms and at least 768kbps bandwidth. |

*requires hardware support

# Software specifications

## Wyse WSM

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| **Device Hardware Requirements** | Windows XP Pro<br>- Minimum processor speed 800 MHz (1GHz or higher is recommended)<br>- Mind. 256 MB (1GB or higher is recommended)<br>Vista and Windows 7<br>- Minimum processor speed 1 GHz (1.5GHz or higher is recommended)<br>- Mind. 1 GB (2GB or higher is recommended)<br>- Flash size/local storage – none needed. If the device has flash it can be used as a local cache for offline mode. |
| **Server Requirements** | Minimum processor speed 1GHz (3GHz or higher is recommended).<br>Server Operating System: Windows XP Pro SP3, Windows Server 2003, Windows Server 2008 and 2008 R2 |
| **Network Requirements** | Server Lan Speed = Minimum 100Mbps (1Gbps and up is recommended)<br>Device Lan Speed = Minimum 10Mbps (100 Mbps full duplex is recommended) |
| **Operating Systems Supported** | Microsoft Windows XP<br>Microsoft Windows Vista<br>Microsoft Windows 7 |
| **Databases supported** | Microsoft SQL 2005 and 2008 (Server and Express Editions) |
| **Built-in high Availability** | - Database availability using SQL clustering.<br>- Built-in server high availability through WSM Server Grouping feature.<br>- Server to Server Fail-over Capability. |
| **Fast and Easy Installation** | - Installing Wyse WSM is simply a matter of running a single, graphical installer.<br>- The installer checks for all the prerequisite components before installation. |

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| **Web-based Admin Console** | - Allows IT administrators to access Wyse WSM from any browser.<br>- Control the entire installation from a central location.<br>- Dramatically simplifies administration, saving IT time and user downtime.<br>- Wizards to guide the user through specific tasks. |
| **Operation System and Application Imaging Tools** | - Imaging tool simplifies the process of creating an OS image for the specific hardware configuration and an application image for all hardware configurations.<br>- All OS and application images are ready for deployment once created, no further modifications needed. |
| **Application Subscription Management** | Use flexible application deployment methods:<br>- Auto-subscribed applications are ready for use when user logs in for the first time.<br>- Manual subscriptions allow users the flexibility to use applications only when needed.<br>- Mandatory subscriptions that cannot be unsubscribed by users. |
| **Protected System Drive** | - Allows administrators to protect the system drive from end user initiated updates.<br>- Prevents changes to operating system drive except by administrators, helping stop viruses, spyware, or malware from infecting the device. |

# Software specifications continued

## Wyse WSM continued

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| **Operating System Streaming** | - Wyse WSM provides an on-demand operating system to Wyse cloud PCs or diskless PCs on the network.<br>- Innovative technology makes each Wyse cloud PC or diskless PC think there is a virtual hard disk attached to the device.<br>- Only those bits needed for the normal device operation are sent in order to reduce network traffic.<br>- Operating-system images can be shared across multiple devices, making management easier. |
| **Flexible Boot Options** | - Each device can boot from four operating system image assignments.<br>- Administrators can assign or let users choose which operating system they want to boot.<br>- First disk mode for the default OS image to boot from every time device starts up.<br>- First available mode to boot from the first responding server in order to balance loads. |
| **Application License Management and Metering** | - Wyse WSM provides the infrastructure to collect information about the application license-usage across the enterprise. This information allows IT organizations to save money associated with application licenses.<br>- Licenses can be stored for all the applications deployed. It also enforces license compliance.<br>- Types of licenses that can be controlled include:<br>1) Time-based licenses (valid for X days). 2) Number of concurrent users. |

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| **Modes of Operation** | Wyse WSM allows administrators to choose modes of operation for the OS:<br>- Private Mode – for administration of operating system images.<br>- Shared Mode – has two additional modes of normal operation:<br>1) Volatile – returns desktop to pristine state after a device reboot.<br>2) Persistent – remembers any user settings after a device reboot. |
| **Remote Servers for Scalability** | - IT administrators can deploy multiple remote servers to improve scalability of the overall solution.<br>- Central management of remote servers allows easy deployment of the solution across different geographic locations. |
| **Comprehensive Reporting** | - Easy ad-hoc reporting based on flexible parameters.<br>- Reports are delivered through HTML, giving you the flexibility to output in any form.<br>- License-metering reports can be used to make proactive purchasing decisions.<br>- License-audit reports can be used for compliance purposes. |
| **Desktop Compatibility** | Wyse WSM works with Wyse C00LE, V00LE, R00L/E, Z00D and X00C family cloud PCs as well as with existing thin clients, diskless PCs and virtual-desktop systems. |

# Contact Wyse


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## Wyse Support Portal

Wyse Support Portal provides a fast and accurate way to communicate interactively with Wyse Customer Support, and helps us respond to your requests more quickly.

http://support.wyse.com/selfservice.html

**Wyse offers cloud client computing sales, service and support expertise around the globe. Click for contact details.**


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THE GLOBAL LEADER IN
CLOUD CLIENT COMPUTING

# Wyse® Z class™

Built for when performance matters most

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THE GLOBAL LEADER IN
CLOUD CLIENT COMPUTING

**Wyse Z50S & Z50D, Z90SW & Z90DW, Z90S7, Z90D7 and Z90DE7 thin clients and Z00D cloud PC**

## High performance

Fast processing. Accelerated graphics and multimedia. Fast and flexible user connectivity. Excellent energy-efficiency.

From the instant the new Wyse Z class – the world's first self configuring windows-based Thin Client boots up – it delivers everything that today and tomorrow's users need in order to tackle the most demanding of virtual desktop environments.

At its heart beats the very latest single or dual core AMD G-Series Accelerated Processing Units or APUs, where all the processing, graphics and HD video tasks are performed on the same piece of silicon. Giving a dramatic leap in user experience and the ideal platform to reap the benefits of Wyse cloud, Virtualization and Management software.

## High definition multimedia experience

Display, manipulate and work with stunning high definition multimedia graphics, voice and video in virtual desktop environments that are ready for Unified Communications. That's the promise the Wyse Z class more than delivers on, with great performance across 2D, 3D and HD video applications. Its new design takes them all in its stride and is the first to include hardware accelerated DirectX® 11 graphics with OpenGL 4.0 and OpenCL™ support.

## Energy efficient

Throughout its long life span the Wyse Z class has the least possible impact on working environments and energy consumption.

Its low energy processor out-performs other more power hungry alternatives, while minimal heat emissions permit a fan-less design that lowers power requirements. It all adds up to an advanced high performance Thin Client that's compliant with the Energy Star Version 5.0*** Thin Client specification.

## At a glance

**Performance**

The AMD Embedded G-Series platform is the world's first low power processor and advanced GPU that's integrated into a single embedded Accelerated Processing Unit (APU).

**Connectivity**

Two SuperSpeed USB 3.0* ports, four USB 2.0 ports, Gigabit networking connectivity, optional single (A/B/G) and dual-band (N) WiFi.

**Wyse Enhanced SUSE Linux**

Secure, flexible and market-leading Linux combined with Wyse optimizations in management and user experience.

**Microsoft Windows Embedded Standard 2009 and 7**

Take advantage of fast, secure and reliable access to the power of Windows Embedded Standard.

**Thin client management**

Wyse Device Manager supports Wyse Z class with scalable enterprise-wide management including simple deployment, patching and updates and asset management – all with secure end-to-end encrypted communications.

**Wyse WSM provisioning software**

Provides compact, energy efficient and productive 'Cloud PCs' with all the dynamic user experience of PCs – without their risks and complexities.

**Green**

Wyse Z class thin clients use under 15 watts** in idle mode – less than the nearest rivals; saving critical carbon output and vital energy budgets. Energy Star Version 5.0 Thin Client specification.

**Call Wyse:** 800 GET WYSE (800 438 9973)

wyse.com

# Specifications

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| **Processors** | AMD G-T52R 1.5 GHz Processor with AMD Radeon™ HD 6310 Graphics (not available for Z90DE7)<br>Dual core AMD G-T56N 1.65 GHz Processor with AMD Radeon™ HD 6310 Graphics |
| **Memory** | Z50S & Z50D 2GB Flash / 2GB RAM<br>Z90SW & Z90DW 2GB Flash / 2GB RAM<br>Z90S7 & Z90D7 4GB Flash / 2GB RAM<br>Z00D 0GB Flash / 2GB RAM<br>Z90DE7 4GB Flash / 2GB RAM<br>Expandable up to 32GB Flash / 4GB RAM |
| **I/O peripheral support** | One DisplayPort. (Optional DisplayPort to DVI-I adapter available)<br>One DVI-I port. DVI to VGA (DB-15) adapter included<br>Six total USB ports: Four USB 2.0 ports (two front, two rear) and<br>Two SuperSpeed USB 3.0* ports on rear (backwards compatible with USB 2.0)<br>Enhanced USB Keyboard with Windows Keys (104 keys) and PS/2 mouse port<br>PS/2 Optical mouse included<br>Z90DE7: One PCIe 2.0 x4 slot with x16 expansion card, half card length, full height<br>**Factory options:**<br>Legacy connectivity - adds 2 serial ports, 1 parallel port and 1 PS/2 keyboard port |
| **Networking** | 10/100/1000 Gigabit Ethernet<br>**Factory options:**<br>Dual Band 802.11 a/b/g/n Wireless<br>Fiber NIC network connectivity<br>Z90DE7: Integrated smart card reader |
| **Display** | VESA monitor support with Display Data Control (DDC) for automatic setting of resolution and refresh rate<br>DisplayPort: 2560x1600@32bpp<br>DVI-I: 1920x1200@32bpp<br>Dual display: 1920x1200@32bpp |
| **Audio** | Output: 1/8-inch mini jack, full 16 bit stereo, 48KHz sample rate,<br>Digital Audio Out, Internal Mono speaker<br>Input: 1/8-inch mini jack, 8 bit stereo microphone |
| **Physical characteristics** | Height: 7.87 inches (200mm), Z90DE7: 8.46 inches (215mm)<br>Width: 1.85 inches (47mm), Z90DE7: 2.72 inches (69mm)<br>Depth: 8.85 inches (225mm) |
| **Weight** | 2.47 lbs. (1.12kg), Z90DE7: 3.5 lbs. (1.59kg) |
| **Mountings** | Vertical feet standard / Horizontal feet optional<br>Optional VESA mounting bracket |
| **Device Security** | Built-in Kensington security slot (cable sold separately) |
| **Power** | Worldwide auto-sensing 100-240 VAC, 50/60 Hz.<br>Energy Star V.5.0<br>Phase V external and EuP compliant power adapter<br>Average power usage with device connected to 1 keyboard with 1 PS/2 mouse and 1 monitor: Under 15 Watts** |
| **Temperature Range** | Operating: 32° to 104° F (10° to 40° C), horizontal and vertical positions<br>Storage : 14° to 140° F (-10° to 60° C) |
| **Humidity** | 20% to 80% condensing<br>10% to 95% non-condensing |
| **Safety Certifications** | German EKI-ITB 2000, ISO 9241-3/-8<br>cULus 60950, TÜV-GS, EN 60950<br>FCC Class B, CE, VCCI, C-Tick<br>WEEE, RoHS Compliant<br>Energy Star & EPEAT listed*** (pending) |
| **Warranty** | Three-year hardware warranty |

* Support for SuperSpeed USB 3.0 is currently not available in Wyse SUSE Linux.

** Z90DE7 can use up to 35 watts with the expansion slot occupied and operational.

*** Not applicable to some option/memory configurations.

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